



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/590,037

08/18/2006

Anja Gerhard

14113-00043-US

5568

23416 7590 10/14/2009  
CONNOLLY BOVE LODGE & HUTZ, LLP  
P O BOX 2207  
WILMINGTON, DE 19899

EXAMINER

WILSON, MICHAEL H

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

10/14/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/590,037	<b>Applicant(s)</b> GERHARD ET AL.	
	<b>Examiner</b> MICHAEL WILSON	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2009 and 07 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4,7-13,15-27 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,4,7-13 and 15-27 is/are allowed.
- 6) ☒ Claim(s) 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7 August 2009 has been entered.

2. It is noted that applicants' amendment filed 10 July 2009 which was previously not entered for the reasons set forth in the Advisory Action mailed 23 July 2009 has now been entered. The following action is based on this now entered amendment.

### ***Response to Amendment***

3. This Office action is in response to Applicant's amendment filed 7 August 2009, which amends claim 1, cancels claim 28, and adds new claim 29.

Claims 1, 4, 7-13, 15-27, and 29 are pending.

4. The objection to the claims in the Office Action mailed 10 April 2009 is withdrawn due to applicants amending of the claims in the reply filed 7 August 2009.

5. The rejection of under 35 U.S.C. 112, second paragraph of claim 28, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

Art Unit: 1794

applicant regards as the invention is withdrawn due to applicant's cancelling of the claim in the reply filed 7 August 2009.

6. The rejection under 35 U.S.C. 102(b) of claims 1, 4, 7-10, 13, 17-21, 23, and 25-27 as being anticipated by Onikubo et al. (US 6,280,859 B1), is overcome due to Applicant's amending of the claims in the reply filed 7 August 2009.

7. The rejection(s) under 35 U.S.C. 103(a) of claims 11, 12, 15, 16, 22, and 24 as being unpatentable over Onikubo et al. (US 6,280,859 B1) is overcome due to applicant's amending of the claims in the reply filed 7 August 2009.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 29 is rejected under 35 U.S.C. 102(b) as being anticipated by Kitazawa et al. (JP 2002/063989 A) machine translation relied upon.

Kitazawa et al. disclose an electric device [0001] comprising a cathode [0012], an anode [0013], and at least one organic layer between the electrodes [0014]. The reference discloses the device with on phosphorescent emitters [0041]. The reference discloses the organic layer to comprise instant example compound 2 ([0017]-[0022] and [0027] second compound).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitazawa et al. (JP 2002/063989 A) machine translation relied upon.

Kitazawa et al. disclose an electric device [0001] comprising a cathode [0012], an anode [0013], and at least one organic layer between the electrodes [0014]. The reference discloses the device with on phosphorescent emitters [0041]. The reference discloses the organic layer to comprise instant example compound 2 ([0017]-[0022] and [0027] second compound). The reference also teaches that the disclosed compounds may be substituted or unsubstituted [0022]. While the reference does not explicitly disclose substituted compounds such as instant example compounds 3 and 4, such compounds would be obvious to one of ordinary skill in the art at the time of the invention. One of ordinary skill in the art would readily expect simple common

Art Unit: 1794

substituents such as methyl or fluoride to be suitable substituent resulting in a similar compound suitable for the same purpose given the disclosure of Kitazawa et al. which teaches substituents to be suitable. While the reference does not exemplify a substituted aryl compound, this does not negate a finding of obviousness under 35 USC 103 since a preferred embodiment such as an example is not controlling. Rather, all disclosures "including unpreferred embodiments" must be considered. *In re Lamberti* 192 USPQ 278, 280 (CCPA 1976) citing *In re Mills* 176 USPQ 196 (CCPA 1972).

***Allowable Subject Matter***

13. Claims 1, 4, 7-13, and 15-27 are allowed.

14. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or suggest the compounds of formulae (2) to (4) as presently claimed. The closest prior art, Onikubo et al. (US 6,280,859 B1), teaches compounds of instant formula (4) the taught compounds comprise arylamine groups which are excluded from the present claims. Ogasawara et al. (US 7,468,212 B2) disclose a compound of instant formula (4) however the prior art compound bears SO<sub>2</sub>CH<sub>3</sub> substituents on R (R= tetraphenylene) which are also excluded from the present claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL WILSON whose telephone number is (571) 270-3882. The examiner can normally be reached on Monday-Thursday, 7:30-5:00PM EST, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/  
Supervisory Patent Examiner, Art Unit 1794

MHW